

with precipitation were not long continued over any extensive areas, nor were the storm movements usually continuous in any particular direction.

Precipitation was fairly general, and in many cases heavy, over most southern States from the 2d to the 4th, extending during the 5th and 6th into the Ohio Valley and adjacent regions and later into New England. Important rains occurred on the 7th and 8th in the Plains States and Rocky Mountain region, and these gradually overspread the central valleys and eastern districts on the 9th and 10th. During this rainy period some unusually heavy falls were reported, notably at Memphis, Tenn., where from the 7th to the 10th the precipitation amounted to nearly 8 inches. Numerous thunderstorms occurred from the 11th to the 13th over an extensive area from the middle Mississippi Valley northeastward to New England, and about the same time rains set in over the far Northwest, some heavy falls occurring near the coast of Oregon and Washington. On the night of the 15th-16th thunderstorms were numerous over considerable areas in the Ohio Valley and to the northward, and locally in Florida and other portions of the South.

In the Rocky Mountain and Great Plains districts rains had very generally ceased by the 12th, and within the following few days clear weather extended into most eastern sections, and but little additional rain occurred in any district until after the end of the second decade. During the night of the 21st-22d a tropical storm approached the Gulf coast somewhat west of the mouth of the Mississippi River, and during the following day or two moved northward, accompanied by rather general rains over a somewhat narrow area. At the same time precipitation set in over the far Northwest and, moving eastward, appears to have united with the southern storm, and rain became general over the greater part of the Missouri and upper Mississippi Valleys on the 23d and 24th. On the latter date some heavy rains were reported from the Southern States, continuing at intervals and locally for several days, and at the same time rains became general in the far Northwest, extending eastward during the following two or three days along the northern boundary, and developing into an extensive thunderstorm area in the vicinity of the Great Lakes by the morning of the 27th, and extending into the East and South during the following day. Near the end of the month a second tropical storm moved inland from the Gulf, passing over the Florida Peninsula and thence northward along the coast during the 29th and 30th. This storm gave heavy rains over the coast States from Florida to New England, high tides along the Florida coast, and unusually low barometer readings and high winds near the southern New England coast.

Total falls of 10 to nearly 15 inches were reported from many of the southern and eastern States, and in the far Northwest the amounts were in some cases larger, nearly 25 inches being reported from a point in Washington. Over most sections from the Middle Plains eastward the amounts were usually sufficient for present needs. Some heavy rains occurred in Arizona, where but little usually falls during this month, notably in the vicinity of Yuma, where the fall was the heaviest ever recorded in September.

SNOWFALL.

In the mountain sections of the Northwest and at points in the Lake region snow occurred on several dates during the last decade, but the amounts were usually small and soon disappeared.

RELATIVE HUMIDITY.

The average relative humidity was mainly above normal, although there were considerable areas in the vicinity of the Great Lakes and in the Missouri Valley, and local small areas elsewhere that had averages less than normal. The departures either way were usually small except over the northern plateau, where the plus values were locally large.

SEVERE STORMS.

Except in localities affected by the two West Indian hurricanes, high winds were reported usually in connection with local thunderstorms and were confined to small areas.

Near Union, Tenn., a severe storm, probably a tornado, occurred in the afternoon of the 10th. One person was killed and crops and buildings were destroyed or injured to the extent of about \$8,000. Near Gouverneur, N. Y., severe thunderstorms on the afternoon of the 12th caused damages to buildings and other property estimated at more than \$100,000.

In the vicinity of Providence, R. I., a severe wind and hailstorm occurred on the morning of the 13th. Damage amounting to a million dollars or more was sustained by greenhouse, fruit, truck, and other interests.

At Whitefish Point, Mich., on the southern shore of Lake Superior, a severe storm occurred on the 15th. The wind attained a velocity of about 90 miles per hour, causing much damage to buildings and trees.

At New York City the highest wind ever recorded in September—80 miles per hour—occurred on the 30th in connection with the storm moving up the Atlantic coast at that time.